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Gymnasium, Shower Room, and Dressing Room Facilities in the Upper Sioux and Hamlin County Conferences

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GYMNASIUM, SHOWER ROOM,
AND DRESSING ROOM FACILITIES
IN THE
UPPER SIOUX AND HAMLIN COUNTY CONFERENCES

by

Fred M. Smith

A Problem submitted to the faculty of South Dakota
State College of Agriculture and Mechanic Arts in
partial fulfillment of the requirements for the
Degree of Master of Science.

July 1955

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TABLE OF CONTENTS

| <u>Chapter</u> | | <u>Page</u> |
|----------------|---|-------------|
| | TABLES. | 12 |
| I | INTRODUCTION | 1 |
| II | PROCEDURE | 3 |
| III | PRESENTATION OF DATA | 5 |
| | Gymnasiums. | 5 |
| | Locker Rooms, Shower Rooms, and Dressing Rooms. | 11 |
| | Administration | 15 |
| IV | INTERPRETATIONS AND IMPLICATIONS OF DATA | 18 |
| | Gymnasiums | 21 |
| | Locker Rooms, Shower Rooms, and Dressing Rooms | 23 |
| V | CONCLUSIONS AND RECOMMENDATIONS | 24 |
| | BIBLIOGRAPHY | 26 |
| | APPENDIXES. | 28 |
| | A. Schools participating in the survey . . | 29 |
| | B. Explanatory letter to superintendents . | 30 |
| | C. Questionnaire | 31 |
| | D. Summary of replies | 34 |
| | E. | |

TABLES

| <u>Number</u> | | <u>Page</u> |
|---------------|---|-------------|
| I | CONTROL, DISTANCE, COST, STORAGE SPACE, AND CARETAKING RESPONSIBILITIES FOR THE SCHOOL-MUNICIPAL COMBINATION GYMNASIUM. . | 6 |
| II | THE EQUIPMENT FREQUENCY DISTRIBUTION | 7 |
| III | FREQUENCY DISTRIBUTION OF FLOOR USE | 8 |
| IV | FREQUENCY OF OBSTRUCTIONS NEAR THE COURT, THEIR DISTANCE AND PROTECTION. | 10 |
| V | FREQUENCY DISTRIBUTION OF PARTICIPATION IN ACTIVITIES | 12 |
| VI | FREQUENCY DISTRIBUTION OF SHOWER HEADS | 13 |
| VII | NUMBER AND TYPE OF LOCKERS IN USE | 14 |
| VIII | NUMBER OF REST ROOM FACILITIES | 14 |
| IX | FREQUENCY DISTRIBUTION OF MAJOR PROBLEMS CONFRONTING ADMINISTRATORS IN BUILDING CONSTRUCTION | 16 |

CHAPTER I

INTRODUCTION

The Problem

Many new coaches and physical education instructors go into the field with great plans for the advancement of a physical education program but are not aware of the type of facilities with which they will be working.

This problem deals with the gymnasiums, locker rooms, and shower rooms as they are found in small schools of Eastern South Dakota. It is the purpose of this problem to gather specific information relative to the present status, the adequacy, and the use of the gymnasium, locker room, shower room, and dressing room facilities in the Upper Sioux and Hamlin County Conferences.

The physical education program in South Dakota has been hampered by a lack of knowledge of the curriculum on the part of many educators and a general lack of support for the program. Until after World War II, little emphasis was placed on this area of education by the teacher training institutions. In the past ten years many of the leading colleges of the state have begun offering a physical education major on the undergraduate level and some on the graduate level. Consequently, many persons who are qualified to coach and teach physical education have been placed in positions throughout the state. Many other trained persons will be going into the field each year.

With this influx of persons who have a knowledge of the needs of the program, many changes will likely be forthcoming. This change will not be rapid and it may take fifteen to twenty years to bring about the understanding that is desired. In the meantime, the new physical education instructors must become aware of the problems they are apt to face with regard to facilities. They have learned how the gymnasium and dressing rooms should be equipped and they can put this knowledge to good use in working toward the improvement of physical education facilities in the state.

CHAPTER II

PROCEDURE

To determine the present status of the facilities of the schools, it was necessary to prepare and send out a questionnaire.

The questionnaire was developed in consultation with the problem advisor, several coaches, and some superintendents. Many books concerned with gymnasium, locker room, and shower room facilities were also consulted. Chief among these was "American School Buildings,"¹ dealing with gymnasium rooms and other facilities. "Methods in Physical Education,"² dealing with use of the facilities, and "American School and University"³ were also scanned for suggestions.

After selecting all the phases to be covered in the questionnaire,⁴ items were chosen and the questionnaire prepared. It was then mailed to the superintendents and coaches of the Hamlin County and Upper Sioux Conferences.

A letter explaining the purpose of the questionnaire and enlisting their cooperation was included. This letter also included instructions for completing certain items in the questionnaire.⁵

1. American Association of School Administrators, "American School Buildings", Washington D. C., National Education Association, 1949.
2. Kozman, Cassidy, and Jackson, "Methods in Physical Education", Second edition, W. B. Saunders Company, Philadelphia, 1953.
3. American School Publishing Corporation, "The American School and University", 1950-51 Yearbook, 22nd annual edition. American School Publishing Corporation.
4. See Appendix C.
5. See Appendix B.

To encourage a large number of returns, self-addressed envelopes were included. All questionnaires were completed and returned. The results were then tabulated and prepared for use in writing up the report. Replies to the questions and statements in nearly all cases were complete and showed careful thought.

The results were then interpreted. Conclusions were drawn and recommendations formulated. A summary was then prepared and sent to all coaches and superintendents who indicated that they would like a copy.

CHAPTER III

PRESENTATION OF DATA

The schools in question ranged in size from 26 to 151 students, with an average number of 72.2. This represents, for the state of South Dakota, the size of schools in which almost all new coaches begin. About three-fourths of the schools in this state are approximately this size.

The purpose of this section is to acquaint the reader with the figures as compiled from the survey, and does not go into detail in interpreting this data. This will be considered in Chapter IV. The material will be discussed in the following general categories: 1) The Gymnasium, 2) The Locker Room, Shower Room, and Dressing Room, and 3) The Administration.

Gymnasiums

In Table I there is found the control, distance, cost, storage space, and caretaking responsibilities for the school-municipal combination gymnasiums.

The facilities are part of the school in eight cases, are municipal in five cases, and school-municipal combination in three cases. One-half of the gymnasiums are adjacent to the school building and the others range up to six blocks from the school, the average being three blocks. The cost to the school for use of the building ranged from nothing to \$750. per year. Five of these schools had storage space ranging from 10 feet by 10 feet to 8 feet by 34 feet. The other three had no storage space at their disposal. The

caretaking duties were the responsibility of the school in three instances.

TABLE I
CONTROL, DISTANCE, COST, STORAGE SPACE, AND
CARETAKING RESPONSIBILITIES FOR THE SCHOOL-MUNICIPAL
COMBINATION GYMNASIUM

| School | Control | Cost | Storage space (size) | Care- taker | Distance from school (blocks) |
|--------|---------|--------------------------|-------------------------|----------------|-------------------------------------|
| A | S-M | \$750. | None | M | 5 |
| B | M | Expenses | 10' x 10' | M | 4 |
| C | M | None | 8' x 24' | S | 6 |
| D | S-M | None | 10' x 10' (2)* | S | 0 |
| E | M | \$450. | 12' x 14' | S | 2 |
| F | S-M | 10% of gate ⁷ | 12' x 16' | M | 2 |
| G | M | \$400. | None | M | 3 |
| H | M | \$400. | None | M | 2 |

Symbols M - Municipal
S - School
S-M - School-Municipal combination
* - 2 rooms
⁷ - in reference to basketball

As for the gymnasium floors, nine were constructed of hardwood, six were concrete and tile, and one was smooth surfaced concrete. Only on one of these courts was there consideration given to any type of apparatus for physical education and then only with regard to volleyball standards.

The floors ranged in size from 30 feet x 60 feet to 50 feet x 86 feet with a mean width of 39.3 feet and a mean length of 67.8 feet. Eleven of the gymnasiums had rigid seats, and this space was not used for activity or storage. Only three were able to utilize this area for anything but seating. Two schools used the space beneath the bleachers for showers and storage and one as storage space only.

The number of times the floors were cleaned varied from daily to three times a year, with most schools indicating that the job was taken care of whenever needed. Eight of the schools indicated that they sealed the floors every year.

There were no markings other than for basketball on thirteen of the floors. Two others had volleyball courts marked and one had markings for shuffleboard.

The equipment frequency distribution is shown in Table II.

TABLE II

THE EQUIPMENT FREQUENCY DISTRIBUTION

| <u>Equipment</u> | <u>Frequency</u> |
|------------------------|------------------|
| Volley Balls and Nets | 10 |
| Kittenballs and Bats | 8 |
| Mats | 6 |
| Table Tennis | 6 |
| Skip Ropes | 5 |
| Weights | 2 |
| Handball | 2 |
| Parallel Bars | 1 |
| Horizontal Bars | 1 |
| Archery Equipment | 1 |
| Climbing Rope | 1 |
| Tennis Equipment | 1 |
| Shuffleboard Equipment | 1 |

There was no indication of equipment for physical education in five of the schools and a relatively small amount was shown in almost all schools.

Most of the single entries came from the same school; thus this does not indicate a scattering of equipment. The overall picture indicates only a very slight activity equipment dispersion for each school.

In Table III is found the frequency distribution of floor utilization.

TABLE III
FREQUENCY DISTRIBUTION OF FLOOR USE

| <u>Activity</u> | <u>School</u> | <u>Community</u> |
|--------------------------|---------------|------------------|
| Basketball | 16 | 9 |
| Pre-season track | 12 | 0 |
| Bad-weather football | 7 | 0 |
| Boys physical education | 14 | 2 |
| Girls physical education | 10 | 2 |
| Band | 9 | 1 |
| Classrooms | 0 | 2 |
| Intramural athletics | 12 | 3 |
| Assemblies | 9 | 8 |
| Parties | 13 | 6 |
| Plays | 12 | 6 |
| Dances | 7 | 5 |
| Movies | 8 | 3 |
| Boxing | 2 | 1 |
| Skating | 3 | 3 |
| Wrestling | 1 | 0 |
| Choral activities | 12 | 4 |
| Lunchroom | 1 | 0 |
| Grade activities | 13 | 2 |
| Social games | 11 | 4 |
| Commencement | 9 | 0 |
| Baccalaureate | 9 | 0 |

One school used the floor only for basketball, while most of the schools had a rather thorough coverage of most activities. The community also made use of the floors for many activities and the survey indicates that many evenings were allotted to them.

The walls and ceilings were light colored in all but four of the gymnasiums. Two of those that were not light colored were unpainted, uncovered cement blocks and the other two were dark stained wood walls.

Seven of the buildings had no ventilation other than by natural conditions. Four had no forced air for their furnaces and used only natural draft. For heating, seven schools used steam, five used coal, three used oil, and one used gas.

There were four schools reporting two exit doors, six reporting three, and the others had four or more in their gymnasiums. All schools reported that these doors opened outward, except one door in one school. Ten schools have either an emergency latch bar on the doors or they swing freely. The time required to empty the building when filled, in case of emergency, was from twenty seconds to three and one-half minutes, with a mean time of two minutes.

Eleven of the schools have no fountains. Four of the schools with fountains have the jutting type with no protection. A common characteristic of all gymnasiums was the fact that they had obstructions on or near the court.

Table IV shows the obstructions near the court, including those that are protected and their distance from the court, as reported by each school.

TABLE IV
FREQUENCY OF OBSTRUCTIONS NEAR THE COURT
THEIR DISTANCE AND PROTECTION

| <u>Type</u> | <u>Frequency</u> | <u>Protected</u> | <u>Distance from court</u> | | |
|-------------------|------------------|------------------|----------------------------|-------------|-------------|
| | | | <u>Min.</u> | <u>Max.</u> | <u>Mean</u> |
| Building supports | 4 | 2 | 1' | 3' | 1½' |
| Air or vent ducts | 3 | 2 | 0 | 1' | 1/3' |
| Stage | 6 | 2 | 1' | 6' | 2½' |
| Seats | 6 | 1 | 1' | 2' | 1 1/3' |
| Basket supports | 2 | 1 | 7' | 7' | 7' |
| Doors | 5 | 0 | 1' | 3' | 1½' |
| Walls | 10 | 3 | ½' | 3' | 1½' |
| Fountains | 4 | 0 | 2' | 6' | 3½' |
| Heat vents* | 1 | 0 | 0 | - | 0 |

* one school reporting register built into the playing floor.

Only two schools reported nothing other than the walls within six feet from the end of the court. There were markedly few protections for any other than the most obvious of these. One school had air and vent ducts extending onto

the playing court on each end of the floor, causing the boundry marks to be irregular. Three schools had metal basket supports within seven feet above the ends of the court, with only one of these having protection against injury.

One school had a heating plant in the basement and a hot air register in the floor with a metal covering. This was part of the playing court and caused an irregularity in the resilience. There was no means of protective covering for this condition.

Although eight gymnasiums joined the high school proper, none was acoustically treated. Only one of those schools in the survey indicated the building was acoustically treated, and it was not a part of the school, although it was on the same lot.

Locker rooms, shower rooms, and dressing rooms

These facilities in almost all cases were inadequate for the amount of use to which they were subjected. This use is indicated in Table V by showing the number of persons participating in activities at a given time who would require shower room, locker room, and dressing room facilities. Table VI gives the number of shower heads that are useable and an indication of their use can be gathered by comparison with Table V.

TABLE V
FREQUENCY DISTRIBUTION OF PARTICIPATION
IN ACTIVITIES

| <u>School</u> | <u>Basketball</u> | | | | <u>Physical Education</u> | | <u>Tournaments</u> | <u>Total</u> |
|---------------|-------------------|-----------------|--------------|-------------------|---------------------------|--------------|--------------------|--------------|
| | <u>Varsity</u> | <u>"B" Team</u> | <u>Grade</u> | <u>Intramural</u> | <u>Boys</u> | <u>Girls</u> | | |
| A | 20 | 0 | 12 | 12 | 20 | 15 | 48 | 127 |
| B | 15 | 10 | 0 | 0 | 0 | 0 | 0 | 25 |
| C | 20 | 0 | 20 | 12 | 0 | 0 | 0 | 52 |
| D | 15 | 20 | 25 | 20 | 25 | 30 | 48 | 183 |
| E | 16 | 15 | 15 | 30 | 25 | 25 | 72 | 198 |
| F | 15 | 15 | 15 | 30 | 30 | 30 | 75 | 210 |
| G | 20 | 20 | 20 | 30 | 27 | 0 | 0 | 117 |
| H | 15 | 15 | 30 | 20 | 15 | 30 | 0 | 125 |
| I | 12 | 12 | 18 | 24 | 0 | 20 | 48 | 134 |
| J | 30 | 0 | 0 | 0 | 0 | 0 | 92 | 122 |
| K | 12 | 10 | 30 | 20 | 0 | 8 | 0 | 80 |
| L | 16 | 0 | 10 | 10 | 0 | 10 | 0 | 46 |
| M | 14 | 0 | 12 | 14 | 14 | 14 | 0 | 68 |
| N | 12 | 12 | 15 | 20 | 25 | 25 | 0 | 109 |
| O | 10 | 15 | 10 | 10 | 0 | 40 | 0 | 85 |
| P | 15 | 15 | 15 | 0 | 0 | 40 | 45 | 130 |
| Mean No. | 16 | 10 | 15 | 16 | 11 | 18 | 27 | 113 |

TABLE VI

FREQUENCY DISTRIBUTION OF SHOWER HEADS

| <u>School</u> | <u>Shower Heads</u> |
|---------------|---------------------|
| A | 2 |
| B | 1 |
| C | 2 |
| D | 3 |
| E | 4 - 4* |
| F | 2 |
| G | 2 - 1* |
| H | 2 - 2* |
| I | 4 |
| J | 6 |
| K | 1 |
| L | 2 |
| M | 1 |
| N | 2 |
| O | 3 |
| P | 1 |

* two shower rooms

The floors in these rooms were concrete in every case, although one school had no shower room or rest room. Another had no rest room and exceptionally poor dressing room facilities.

Table VII gives the number and types of lockers in use and shows the general lack of space in this department. A comparison with Table V will indicate the number of users of lockers in the school. That number will be slightly less than the total number in that some of those participants will be counted in two or three groups.

TABLE VII
NUMBER AND TYPE OF LOCKERS IN USE

| <u>School</u> | <u>Type</u> | | |
|---------------|--------------------|-------------------|---------------|
| | <u>Full length</u> | <u>1/3 length</u> | <u>Basket</u> |
| A | 10 | 0 | 0 |
| B | 0 | 0 | 0 |
| C | 0 | 10 | 0 |
| D | 40 | 0 | 40 |
| E | 50 | 0 | 0 |
| F | 10 | 0 | 0 |
| G | 20 | 28 | 0 |
| H | 4 | 20 | 0 |
| I | 0 | 0 | 0 |
| J | 0 | 0 | 40 |
| K | 0 | 10 | 0 |
| L | 0 | 0 | 12 |
| M | 0 | 0 | 0 |
| N | 0 | 0 | 0 |
| O | 0 | 0 | 10 |
| P | 0 | 20 | 0 |

An indication of the number of rest room facilities can be gathered from Table VIII.

TABLE VIII
NUMBER OF REST ROOM FACILITIES

| <u>School</u> | <u>Stools</u> | <u>Urinals</u> |
|---------------|---------------|----------------|
| A | 1 | 0 |
| B | 0 | 0 |
| C | 1 | 0 |
| D | 2 | 1 |
| E | 2 | 2 |
| F | 2 | 2 |
| G | 1 | 1 |
| H | 4 | 3 |
| I | 4 | 1 |
| J | 1 | 2 |
| K | 2 | 2 |
| L | 3 | 2 |
| M | 0 | 0 |
| N | 1 | 0 |
| O | 1 | 1 |
| P | 4 | 2 |

Table VIII shows the small number of facilities in use in the schools and, when compared with Table V, it indicates the use to which these accommodations are subjected.

All of these utilities were adjoining the dressing room or shower room.

Thirteen of the schools reported they did not have enough space in these departments. The rooms were cleaned daily in eleven schools, three times weekly in one school, two times weekly in two schools, and only one time a week in two schools.

Ten schools had municipal sewage disposal and six had local septic tanks. These septic tanks were cleaned annually in five schools and as needed in the other.

Eleven schools had a municipal water pressure system, four had a local water pressure system, and one had no pressure system at all.

Administration

Eight superintendents reported they were satisfied with their buildings and thought them suitable and adequate. Two stated that their rooms were not suitable and are building this year, and two others are contemplating a building program. Four schools are not planning to build in the immediate future. The reasons given for not building and for delay in building are shown in Table IX.

TABLE IX
FREQUENCY DISTRIBUTION OF MAJOR PROBLEMS
CONFRONTING ADMINISTRATORS
IN BUILDING CONSTRUCTION

| <u>Problem</u> | <u>Frequency</u> |
|--|------------------|
| Inability to convince the public of the need | 3 |
| Need of other rooms and facilities first | 3 |
| Insufficient funds | 2 |
| Need for other municipal improvements first | 2 |
| Inability to carry on a school program* | 1 |

*One school plans to quit operating after the 1955-56 school year due to the small number of students and high cost of plant operation.

Most schools preferred the type of floor which they were using, except for two having hardwood and one having concrete and tile. Of these, one school had poor construction on the original hardwood court, and the other gave no reason. The administrator not liking tile, gave inability to keep this clean as his reason. All but two administrators preferred hardwood floors if they were rebuilding.

Nine schools indicated that they were satisfied with the type of bleachers they were using. It was the opinion of the administrators, if rebuilding, folding bleachers would be the most advantageous because of the added space.

Five schools were satisfied with their lockers and locker rooms. The main thought in rebuilding was to gain more room and increase the number and size of the lockers.

Five schools were satisfied with their showers and shower rooms. The ideas in rebuilding were for new and better locations, using higher levels for better drainage, and increasing the size. One administrator indicated he did not like showers because they were a waste of water.

Six administrators were satisfied with their dressing rooms. Ideas for improvement included better ventilation, different location, more privacy, and in almost all cases increased size.

Nine were satisfied with their rest rooms. Most of them wanted more stools and urinals, a separation for students and public, and relocation.

CHAPTER IV

INTERPRETATIONS AND IMPLICATIONS OF DATA

There are 306 high schools listed in the state of South Dakota for the school year 1954-55. Of these schools only fifty-one have an enrollment of more than those surveyed and twenty-two had an enrollment of less than the surveyed group. The enrollment covered schools from twenty-six to one hundred and fifty-one students.* This group has a representative number of over 76% of all schools. Considering those schools smaller than the survey group as having about the same type of facilities, the group would have a representative number of over 83% of the schools in South Dakota.

It should not be taken for granted that this survey represents all of these schools. It would take a much larger sample to accomplish this, but the results can be indicative of many of the schools.

Gymnasiums

As previously mentioned, eight of the plants did not adjoin the school and ranged up to six blocks away. This would impose a severe handicap on the program of physical education.

*all figures from: Freeman, Harold S., "Educational Directory of South Dakota Schools", Hipple Printing Company, Pierre, South Dakota, November 1954 pp. 5, 16-31, 1954-55.

In all schools the instructor taught academic classes. Teachers assigned to teach physical education along with their other courses would have to move from one building to the other between each class. This would also be true for the students, and some means of supervision for them would have to be devised and carried out. A great amount of time would be spent traveling from one building to the other and consequently would cut down on the time spent in the classroom. In winter, the students would be forced to finish their physical activities in time to "cool-off" before dashing outside to go to the other building.

Three of these buildings did not have storage space, consequently all the material being used in the activity classes would have to be taken back to the school plant after each day of activity.

The control of the plant determines who is to use the facilities, when, and to what extent. In these eight schools which were either municipally controlled or controlled by the school and municipality together, additional complications arise.

Rather than being able to devise a program of physical education directly in these eight cases, recommendations have to pass through the school superintendent and then be cleared through the municipal board of control, adding still more work to the already overworked instructors of the small schools.

Many activities in the program would be curtailed due to the almost complete lack of apparatus fixtures built into the gymnasium floors. To complete the program, many pieces of apparatus would have to be designed for use without the help of these plates.

The Plant Guide Committee¹ states the physical education teaching area shall be about 48 feet x 76 feet. The size of the floors would be below this recommendation in all but two schools, although five others would come close to this recommendation. The size of these floors would also curtail many of the activities to be projected in a good physical education program.

Another curtailing feature of the buildings would be the lack of adequate markings on the floors. To alleviate this condition, either temporary markings would have to be put on the floor or markings could be put into the floor permanently. The latter would be expensive on most courts as it would mean sanding on all hardwood courts, painting the marks on the floor, and putting a seal over the floor. Temporary marks could be painted on the floor until the time came for this refinishing.

The amount of equipment in use in the physical education department was also noticeably small. Most schools reported no more than three different types of equipment.

1. Plant Guide Committee, "Guide For Planning School Plants", National Council on Schoolhouse Construction, Nashville, Tennessee, 1949, pp. 99.

This would indicate the necessity for a great amount of new equipment to establish a good program for physical education. As this would have to be distributed over a few years' time, many allowances must be made in planning a program until adequate equipment is obtained.

Fourteen of the schools reported they had a physical education program. By talking to administrators and coaches, it was learned that the program as it now stands consists of only basketball in ten of the schools. Twenty different activities were reported by the schools and fourteen by the community. This would put the floor to very extensive and, in some cases, very hard use. This would also curtail the amount of time allowed for physical education.

The obstructions on the courts of all but two of the floors would be a big factor with which the instructors would have to contend. The activities of the class would have to be directed away from these and in most cases extreme caution and alertness would have to be exercised in order to prevent injury to the students. Protection would have to be added in many places to make the area safe for use.

Placement of many of the new markings on the floor would have to be so as to direct activities away from these obstructions.

Locker rooms, shower rooms, and dressing rooms

These were among the most overworked facilities in the school system. In most of the schools they were inadequate

for even the smallest groups participating in activities. School administrators have this to say of shower rooms, regarding the type and plan:

"Gang and common shower rooms are recommended for boys, using one shower head for each three or four boys in the class. Girls are now provided with the same facilities; however, in most communities it is advisable to have some private showers and dressing stalls. Where gang-type showers are used, controlled by valves located outside of the shower area itself, these should be broken down into convenient size units so that only the number of shower heads that will be used will be turned on."¹

As many as forty students were in one class where only one shower head was in use. Only one of these schools would have been able to meet the standards and then only by dividing the class and using separate dressing rooms.

The Plant Guide Committee has set standards for locker use in the physical education department as follows:

"A modern secondary school physical education plant must provide a locker or other facility for the gymnasium clothing of each pupil in the school, accessible to the gymnasium and to outdoor play areas. . . Many methods of handling gymnasium clothing have been tried. Probably the most satisfactory method is to provide enough street-clothing lockers to accommodate the largest section which will use the room at any one time. In addition, enough small lockers, large enough only to hang gymnasium clothing, should be provided for each child who may use the facility."²

These standards are not even closely approximated by the lockers in the schools studied.

1. American Association of School Administrators, (American School Buildings), Department of N.E.A., 1949, pp. 164.
2. Plant Guide Committee, *op. cit.*, pp. 105.

The number of rest room facilities was equally deficient. The physical education departments are forced to take whatever they can get in most cases.

One of the dressing rooms was a space allotted in the already crowded furnace room. Another was a 4 foot wide room under the bleachers. Another was a closed-off end of a corridor. Another used a classroom. The cleaning of the dressing room in five cases occurred less than one time a day, even though the rooms were used daily.

Administration

Since 1945, five communities have built new gymnasiums. Two others have a building program in progress at the present time and hope these facilities will be complete and ready for use before the end of the present year. Two other schools are working on a program for building in the near future. This is an indication that some progress is being made and will tend to facilitate the inauguration of a new program or the advancement of the present program in physical education.

It was evident from the replies to the surveys that some administrators were not aware of the inadequacies of their facilities and the standards in these respects, and some seemed content to let the program and facilities continue as they are. It is the belief of the writer, from talking with these persons, that there is a need for a much more progressive and interested attitude toward the physical education program. If we are to serve the interests of the youth, a real attempt at improvement should be made.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

It was the purpose of this problem to determine the status, the adequacy, and the use of the gymnasium, locker room and shower room facilities in the Upper Sioux and Hamlin County Conferences.

The schools' administrators do not have direct authority over the gymnasiums in one-half of the schools. These are municipally controlled or controlled by the school and municipality together.

Most of the school gymnasiums did not approach the recommended standards for size of physical education teaching areas. There was a lack of markings, floor fixtures, and equipment for use in this department. Both municipal and school groups made extensive use of the floors. Most of the gymnasiums had obstructions on or near the floor that would create hazards for a physical education class.

There were not enough lockers for more than a small minority of the students. The shower rooms and rest rooms were taxed beyond the limits of normal standards.

The location of some of the locker rooms, shower rooms, and dressing rooms was not conducive to good teaching situations. Many schools had such poor facilities that good health habits could be taught only with difficulty.

Although one-third of the schools have built new physical education plants in the past ten years, most of the facilities

studied in this survey were not planned and equipped for the use to which they have been subjected.

Recommendations

A careful analysis of the needs should be made by all communities to determine whether they are meeting the desired objectives of education with regard to physical, emotional, and social development.

A physical education program for all and not just for the most talented should be inaugurated.

A broader program of activities should be included to meet the needs of individuals with divergent interests.

A broader program of equipment installation for the physical education department should be instituted.

Careful study should be given to relocating activities that are not a part of the physical education athletic program so as to avoid conflicts in scheduling.

There is much room and a real need for additional research and study in this area.

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A P P E N D I X

APPENDIX A

SCHOOLS PARTICIPATING IN THE SURVEY

| <u>School</u> | <u>Superintendent</u> |
|---------------|-----------------------|
| Astoria | L. Fjellestad |
| Bruce | M. R. Finley |
| Bryant | G. A. Aaland |
| Castlewood | G. Webbenhurst |
| Clear Lake | S. G. Froiland |
| Elkton | H. T. Ekberg |
| Estelline | O. J. Pederson |
| Hayti | F. L. Kiner |
| Hazel | L. M. Paulson |
| Lake Norden | J. L. Kleinsasser |
| Sinai | E. H. Bye |
| Thomas | A. L. Wilcox |
| Toronto | A. N. Hill |
| Volga | J. C. Miller |
| White | V. E. Lewis |
| Willow Lake | G. D. Miller |

Estelline, South Dakota
April 19, 1955

Dear Superintendent:

The enclosed questionnaire is being sent to the superintendents in the Upper Sioux and Hamlin County Conferences of eastern South Dakota. It was prepared for the purpose of determining the status of locker room and gymnasium facilities in this area, relative to equipment, facilities, control, and use. It is the thought of the writer that information obtained will be of value to the schools in this area by illustrating the athletic room situation as it actually exists.

It is also felt that information compiled will be of value to colleges offering Physical Education majors and minors and to young men interested in entering the coaching profession. Schools such as ours are typical of those throughout the state.

The results of this study will be written up in the form of a Research Problem which partially fulfills the requirements for a Master's Degree at South Dakota State College. Your cooperation in filling out this questionnaire and returning it promptly in the enclosed envelope will be greatly appreciated. A summary of the results will be sent to all superintendents indicating a desire to receive them.

Time required to answer the questionnaire, approximately fifteen minutes.

Sincerely,

Fred M. Smith, Coach
Estelline High School
Estelline, South Dakota

Encl.

APPENDIX C

QUESTIONNAIRE TO DETERMINE THE PRESENT STATUS OF
LOCKER ROOM AND GYMNASIUM FACILITIES

IN THE HAMLIN COUNTY AND UPPER SIOUX CONFERENCE SCHOOLS OF EASTERN SOUTH DAKOTA

1. High school enrollment _____
2. Do you have a basketball court? yes _____ no _____
3. Is it part of the school building? yes _____ no _____
If not, how many blocks is it from the school? _____
4. Is it at ground level, below, or above? (underline) _____
5. If above or below ground level, state how far _____
6. Who has control of the court?
school, municipal, private, school-municipal combination (underline) _____
If municipal or private, what are the financial arrangements? _____
What are the caretaking, equipment, and utility arrangements? _____
7. Is there a school storage space? yes _____ no _____. How large? _____
8. Of what is the floor constructed? (underline)
Concrete, concrete & tile, hardwood, other (specify) _____
9. What is the size of the playing floor? _____
10. How often is the floor sanded? _____ sealed _____ cleaned _____
11. What type of sealer is used? _____
12. What type of cleansing soap is used? _____
13. What apparatus locks are built into the floor? _____
14. What is the seating capacity? _____
15. What types of seats are used? folding _____ rigid _____
16. What direction does the floor run? east & west, north & south
17. Where are the seats located? north, south, east, west sides. (underline) _____
18. How many entrance-exit doors are there to the gymnasium? 1 2 3 4 more
19. Are the doors equipped with an emergency latch? yes _____ no _____
20. What type of doors are used at the exits?
single, double, latch, swinging (underline) _____
21. Do the doors open inward _____ or outward _____? (check)
22. How quickly can the building be evacuated in case of an emergency? _____
23. How high are the windows? _____
24. How are they protected? _____
25. How are they operated? manual, rod, other (specify). (underline) _____
26. To which side(s) are the windows located? north, east, south, west.
27. Is there any control over glare? yes _____ no _____
If yes, how is glare controlled? Shades, blinds, other (specify) _____
28. What is the color of the walls? _____ ceiling? _____
29. How is the building ventilated? _____
30. How is it heated? _____
31. What type of bankboards are used? Fan, Rectangular. Number _____
Are they permanent? yes _____ no _____
32. What type of fountains are used? Jutting, recessed, none. Number _____
Where are they located? North, east, south, west sides.
33. Is the building acoustically treated? yes _____ no _____

34. Are there any obstructions near the court? yes no
 If yes, check the type, whether protected, and give distance from court.

| | Type | Protected | Distance from court |
|----------------------------|-------|-----------|---------------------|
| Building supports. | _____ | _____ | _____ |
| Air or vent ducts. | _____ | _____ | _____ |
| Stage. | _____ | _____ | _____ |
| Seats. | _____ | _____ | _____ |
| Basket supports. | _____ | _____ | _____ |
| Doors | _____ | _____ | _____ |
| Walls | _____ | _____ | _____ |
| Fountains. | _____ | _____ | _____ |
| Other (specify) _____ | _____ | _____ | _____ |

35. What uses are made of the floor by the school and the community?

| | School | Community |
|------------------------------------|--------|-----------|
| Basketball. | _____ | _____ |
| Pre-season track | _____ | _____ |
| Bad-weather football | _____ | _____ |
| Boys physical education | _____ | _____ |
| Girls physical education | _____ | _____ |
| Band | _____ | _____ |
| Classrooms | _____ | _____ |
| Intramural athletics | _____ | _____ |
| Assemblies | _____ | _____ |
| Parties | _____ | _____ |
| Plays | _____ | _____ |
| Dances | _____ | _____ |
| Movies | _____ | _____ |
| Boxing | _____ | _____ |
| Skating | _____ | _____ |
| Wrestling | _____ | _____ |
| Choral Activities | _____ | _____ |
| Luncheonroom | _____ | _____ |
| Grade activities | _____ | _____ |
| Social games | _____ | _____ |
| Other | _____ | _____ |

36. What markings are there on the gymnasium floor other than basketball? volleyball, kittenball, tennis, badminton, shuffleboard, other

37. What equipment for physical education and other activities do you have? Mats, parallel bars, horizontal bars, side horse, weights, handball, table tennis, volleyball nets and balls, kittenball bats and balls, archery equipment, climbing rope, skip ropes, climbing ladder, rings, other

38. How many students use the gymnasium and locker rooms at one time? (state largest class.)

| | |
|----------------------------|-------|
| A Basketball | _____ |
| B Basketball | _____ |
| Grade Basketball | _____ |
| Intramural basketball | _____ |
| Physical Education (boys) | _____ |
| Physical Education (girls) | _____ |
| Other (specify) | _____ |

39. Do you hold any basketball tournaments? yes no

40. If yes, how many participants do you have during the tournaments?

41. Is there a separate physical education and athletic office? yes no

42. If yes, how large is it? Does it adjoin the gym?

13. What type of floors do you have in your

locker rooms

shower rooms

rest rooms

cement

tile

terrazo

marble

wood

other (specify)

14. How many shower heads are there in each shower room? 1 2 3

15. How many lockers in each locker room? 1 2 3

What type of lockers do you use? full length, 1/3 length, basket-type

16. How many rest rooms adjoining the gymnasium? 1 2 3 4

17. How many stools in each? Urinals

18. Do you have enough space in your locker rooms? yes no

19. Do you have enough space in your shower rooms? yes no

20. How often are your locker rooms, shower rooms, and rest rooms cleaned?

locker rooms time(s) a day or time(s) a week

shower rooms time(s) a day or time(s) a week

restroom time(s) a day or time(s) a week

21. Is your sewage disposal municipal or local?

22. If local, do you have septic tanks or run-off drainage?

23. How often are your tanks cleaned? times each year

24. What type of water pressure system do you have?

Municipal

Local pump

None

25. Is your athletic building suitable and adequate? yes no

26. If answer is no, are you contemplating a building program? yes no

27. If your answer to number 26 is no, please specify why not.

Insufficient funds

Inability to convince the public of the need

Need for other room and facilities first

Other (specify)

28. In general, are you satisfied with the type of floor that you are using?

yes no. If you were rebuilding, would you use the same type?

or would you change types Comment

29. Are you satisfied with the type of seats? If rebuilding, would you

use the same type? Comment

30. Are you satisfied with the type of lockers & locker rooms? If re-

building, would you use the same type? Comment

31. Are you satisfied with the type of showers & shower rooms? If re-

building, would you use the same type? Comment

32. Are you satisfied with the type of dressing room? If rebuilding, would

you use the same type? Comment

33. Are you satisfied with the type of restrooms? If rebuilding, would

you use the same type? comment

34. Would you like a record of the compiled results? yes no

APPENDIX D

SUMMARY OF REPLIES

1. High school enrollment? 26-151 Mean 72.2
2. Do you have a basketball court? yes 15 no 1
3. Is it part of the school building? yes 8 no 8
If not, how many blocks is it from the school? 0-6 Mean 3
4. Ground level 2 Below 6 Above 1
5. Below 2' - 10' Mean 7' Above 14'
6. Who has control of the court? School 8 Municipal 5
Municipal-school combination 3
Financial arrangements? 0 - \$750. per year including care-taking and 10% of gate. The caretaker was provided by the municipality in five schools, school furnished their own caretaker in the other three schools.
School storage space? yes 5 No 3 10' x 10' to 8' x 34'
7. Floor construction? Hardwood 9 Concrete 1 Concrete-tile 6
8. Size of playing floor? 30' x 60' to 50' x 86' Mean 39.3' x 67.8'
9. How often is the floor sanded? annually to every 20 years
10. Sealed? annually to every 5 years
11. Cleaned? daily to three times a year.
12. What apparatus locks are built into the floor? None 14
Badminton 1 Volleyball 1
13. What is the seating capacity? 100 - 1,500 Mean 461
14. What types of seats are used? folding 5 Rigid 11
15. What direction does the floor run? north and south 12
east and west 4
16. Where are the seats located? south 6 east 8 west 8 north 3
17. How many entrance-exit doors to the gymnasium? 2 - 5 Mean 3.5
18. Are the doors equipped with an emergency latch? yes 9 no 6
swing freely 1
19. What type of doors are used at the exits? single 4 double 12
20. Do the doors open inward? 0 outward? 16
21. How quickly can the building be evacuated in case of an emergency? 20 seconds to 3 minutes Mean 2 minutes
22. How high are the windows? 3' - 15'
23. How are they protected? metal screens 4 steel bars 2
wood bars 2 none 8
24. How are they operated? manual 9 glass block 3 none 5
25. To which side(s) are the windows located? south 5 north 3
east 7 west 8
26. Is there any control over glare? yes 9 no 3
How is glare controlled? shades 6 glass block 3
27. What is the color of the walls? light 12 natural block 2
dark stain 2
28. How is the building ventilated? forced air 13 natural 6
29. How is it heated? steam 7 forced air 5 radiation 4

30. What type of bankboards are used? Fan 16 Permanent 15 yes 1 no
 31. What type of fountains are used? jutting 4 recessed 1
 none 11
 32. Is the building acoustically treated? yes 1 no 15
 33. Are there any obstructions near the court? yes 12 no 4
 34. Type of obstructions: See Table IV.
 35. What uses are made of the floor by the school and the community? See Table V.
 36. What markings are there on the gymnasium floor other than basketball? none 13 volleyball 2 badminton 0 shuffleboard 1
 37. What equipment for physical education and other activities do you have? See Table II
 38. How many students use the gymnasium and locker rooms at one time? See Table VII
 39. Do you hold any basketball tournaments? yes 7 no 9
 40. If yes, how many participants during the tournaments? 45 - 98
Mean 61.1
 41. Is there a separate physical education and athletic office? yes 2 no 14
 42. If yes, how large is it? 8' x 10' to 10' x 16' Does it adjoin the gymnasium? yes 2
 43. What type of floors do you have in locker rooms? 15 cement Shower? 15 cement Rest room? 13 cement, 1 wood, 2 none
 44. How many shower heads are there in each shower room?
1 - 6 Mean 2
 45. How many lockers in each locker room? 0 - 50 Mean 20
 What type lockers? full length, $1/2$ length, $1/3$ length
 See Table VII
 46. How many rest rooms adjoining the gymnasium? 0 - 2 Mean 1.5
 47. How many stools in each? 0 - 4 Mean 2 Urinals? 0-3 Mean 1
 48. Do you have enough space in your locker rooms? yes 1 no 15
 49. Do you have enough space in your shower rooms? yes 6 no 9
 50. How often are your locker rooms, shower rooms, and rest rooms cleaned?
 Locker 11 daily. .2 two times weekly. .1 weekly
 Shower 11 daily. .2 two times weekly. .1 weekly
 Rest rooms . . 11 daily . 2 two times weekly. .1 weekly
 51. Is your sewage disposal municipal 10 local 6
 52. If local, do you have septic tanks? yes 6
 53. How often are your tanks cleaned? annually 5 as needed 1
 54. What type of water pressure system do you have? municipal 11
 local 6
 55. - 64. Summation of comments.

Eight superintendents reported they were satisfied with their buildings and thought them suitable and adequate. Two stated that their rooms were not suitable and are building this year, and two others are contemplating a building program. Four schools are not planning to build in the immediate future.

Most schools preferred the type of floor which they were using, except for two having hardwood and one having concrete and tile. Of these, one school had poor construction on the original hardwood court, and the other gave no reason. The administrator not liking tile, gave inability to keep this clean as his reason. All but two administrators preferred hardwood floors if they were rebuilding.

Nine schools indicated that they were satisfied with the type of bleachers they were using. It was the opinion of the administrators, if rebuilding, folding bleachers would be the most advantageous because of the added space.

Five schools were satisfied with their lockers and locker rooms. The main thought in rebuilding was to gain more room and increase the number and size of the lockers.

Five schools were satisfied with their showers and shower rooms. The ideas in rebuilding were for new and better locations, using higher levels for better drainage, and increasing the size. One administrator indicated he did not like showers because they were a waste of water.

Six administrators were satisfied with their dressing rooms. Ideas for improvement included better ventilation, different location, more privacy, and in almost all cases increased size.

Nine were satisfied with their rest rooms. Most of them wanted more stools and urinals, a separation for students and public, and relocation.